

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for generating a registered image of a body part of a patient for use in a computer aided surgical procedure, the method comprising:
  - attaching a first marker detectable by a first tracking system to the body part prior to any surgical steps of the surgical procedure, the first tracking system having a first reference frame;
  - using an imaging system having a second marker attached thereto in a known positional relationship relative to the imaging plane of the imaging system to capture at least a first image of at least a portion of the body part using an imaging system;
  - during the capturing step, using the first tracking system to detect the position of the first marker and the second marker in the first reference frame;
  - obtaining an indication of the position of the first image relative to the first reference frame of the first tracking system using the detected position of the second marker and the known positional relationship between the second marker and the imaging plane;~~and~~
  - determining a mapping to bring the first image into registration with the position of the body part in the first reference frame using the detected position of the first marker;
  - detecting the position of the first marker using a second tracking system in an operating theatre, the second tracking system having a second reference frame; and
  - using the mapping to register the first image with the detected position of the body part in the second reference frame.

2-3. (Cancelled)

4. (Previously Presented) The method of claim 1, wherein the capturing step comprises capturing a first image that includes the first marker and at least a portion of the body part, and wherein the position of the first marker in the first image is used to determine the mapping.
5. (Previously Presented) The method of claim 1, and further comprising the step of displaying the registered image during the computer aided surgical procedure by detecting the position of

the first marker during the computer aided surgical procedure and using the mapping to register the image with the detected position of the first marker.

6. (Previously Presented) The method of claim 1, wherein the surgical procedure is an orthopaedic procedure.

7. (Previously Presented) The method of claim 1, wherein the step of attaching the first marker includes implanting the first marker in a bone of the patient.

8. (Previously Presented) The method of claim 7, wherein the step of implanting the first marker includes percutaneously implanting the first marker.

9. (Previously Presented) The method of claim 1, wherein the first marker is wirelessly detectable at a radio frequency by the tracking system.

10. (Previously Presented) The method of claim 1, wherein the imaging system is an X-ray system.

11. (Previously Presented) The method of claim 11, wherein the position of the first marker is detected with the patient standing.

12. (Previously Presented) The method of claim 1, wherein the first marker is wirelessly tracked using a magnetic tracking system.

13. (Currently Amended) The method of claim 10, wherein the second marker is attached to an X-ray detector, and further comprising the step of determining the position of an X-ray detector in the reference frame of the first tracking system.

14. (Previously Presented) The method of claim 10, and further comprising the step of capturing a second image of the body part using the X-ray system, and wherein the second image is in a second direction different to a first direction in which the first image was captured.

15. (Previously Presented) The method of claim 14, wherein the step of capturing the second image includes moving the patient relative to the X-ray system.
16. (Currently Amended) The method of claim 14, wherein the step of capturing a second image includes moving an X-ray source relative to the patient, and further comprising the step of using the first tracking system to determine the position of the X-ray source in the first reference frame of the ~~tracking system~~ when the second image is captured.
17. (Previously Presented) The method of claim 14, wherein the first image is captured using a first X-ray source and wherein the step of capturing the second image includes using a second X-ray source at a second position which is different to a first position of the first X-ray source.
18. (Previously Presented) The method of claim 14, further comprising the step of generating a three dimensional image of the body part from the first and second images.
19. (Previously Presented) The method of claim 10, further comprising the step of determining the distance between the body part and an imaging plane of an X-ray detector along a direction perpendicular to the plane of the imaging plane and using the distance to correct the first image captured by the X-ray detector.
20. (Previously Presented) The method of claim 1, wherein the imaging system is a CT scan or an MR scan system.
21. (Currently Amended) The method of claim 20, wherein the body part of the patient is located on a patient support part of the imaging system when the first image is captured and further comprising determining the position of the patient support part in the first reference frame of the first tracking system.
22. (Currently Amended) The method of claim 21, further comprising the step of mounting a third marker detectable by the first tracking system on the patient support part.

Docket No. DEP5301USPCT  
Serial No. 10/598,601

23. (Previously Presented) The method of claim 20, wherein the body part of the patient is located on a patient support part of the imaging system when the first image is captured, and further comprising the step of determining the position of an imaging plane of the scan system relative to the position of the patient support part.

24. (Previously Presented) The method of claim 20, wherein the first image includes the first marker and at least a portion of the body part and wherein the position of the first marker is detected when the first image is captured.

25-50 (Cancelled)